



Topographic slope versus slab dip of profiles perpendicular to the trench for the Maule earthquake segment (a), the Arauco Peninsula segment (b) and the northern Valdivia rupture area (c). To facilitate the visualization of the possible critical sections of the tapers, dashed-dotted theoretical envelopes for different effective basal frictions from $\phi_b^{eff} = 16$ to 22° ($\mu_b^{eff} = 0.28 - 0.4$), assuming a hydrostatic pore fluid pressure ($\lambda=0.4$) and an internal friction angle $\phi = 35^\circ$ ($\mu=0.7$) are added.